Subject Index of Volume 29

A.c. light source

measurement of minority carrier lifetime in silicon solar cells using an a.c. light source, 73

Amorphous semiconductor

simulation of crystalline GaAs solar cell structures with the amorphous semiconductor analysis package, 319

Back surface field

low-high junction theory applied to solar cells, 129

Back surface field cells

simplified fabrication of back surface electric field silicon cells and novel characteristics of such cells, 119

Cadmium telluride

toxic materials released from photovoltaic modules during fires: health risks, 63

Cell

low-high junction theory applied to solar cells, 129

Cell modelling

InP solar cells for use in space, 221 Concentrator solar power system

a comprehensive report on the performance of the longest operating 350

kW concentrator photovoltaic power PV system, 1

Conductivity

radiation damage in Ge and Si detected by carrier lifetime changes: damage thresholds, 85

Controlled lifetime doping

influence of controlled lifetime doping on ultimate technological performance of silicon solar cells, 109

Conversion efficiencies

high-efficiency Ga_{1-x}Al_xAs-GaAs solar cells, 165

Conversion efficiency

the violet cell: an improved silicon solar cell, 149 Copper gallium diselenide films

photoelectrochemical studies of copper gallium diselenide films, 267

Copper indium diselenide

toxic materials released from photovoltaic modules during fires: health risks, 63

Crystalline material

simulation of crystalline GaAs solar cell structures with the amorphous semiconductor analysis package, 319

Crystalline silicon thin film

analysis of apparent quantum efficiency, 39

CuInSe₂

multijunction cells for space applications, 179

Device thickness

influence of controlled lifetime doping on ultimate technological performance of silicon solar cells, 109

Dielectric optical conductors

photovoltaic array GaAs cells response driven by high power laser diodes, 283

Diffusion length

measurement of minority carrier lifetime in silicon solar cells using an a.c. light source, 73

Electric utilities

photovoltaics and electric utilities: an evaluation of utility attitudes and expectations, 25

Electrical performance

influence of controlled lifetime doping on ultimate technological performance of silicon solar cells, 109

Electrical sources

resistive loads powered by separate or by common electrical sources, 345

Environmental tests

reliability of n-CdS/p-CdTe solar modules in accelerated environmental tests and effect of oxygen, 335 Exposure tests

a new solar cell roofing tile, 361

Fabrication

- a comprehensive report on the performance of the longest operating 350 kW concentrator photovoltaic power PV system, 1
- a process sequence for manufacture of ultra-thin, light-trapping silicon solar cells, 253

Fiber optics

photovoltaic array GaAs cells response driven by high power laser diodes, 283

Fires

toxic materials released from photovoltaic modules during fires: health risks. 63

Ga1-rAl-As-GaAs

an isothermal etchback-regrowth method for high-efficiency Ga_{1-x}Al_xAs-GaAs solar cells, 171 high-efficiency Ga_{1-x}Al_xAs-GaAs solar

cells, 165

GaAs solar cells

- photovoltaic array GaAs cells response driven by high power laser diodes, 283
- simulation of crystalline GaAs solar cell structures with the amorphous semiconductor analysis package, 319

Gallium arsenide

toxic materials released from photovoltaic modules during fires: health risks, 63

Germanium

multijunction cells for space applications, 179

radiation damage in Ge and Si detected by carrier lifetime changes: damage thresholds, 85

Green's function method

preferential doping contribution to the photoresponse of polysilicon solar cells, 49

Health risks

toxic materials released from photovoltaic modules during fires: health risks, 63

Heterojunction solar cells

high-efficiency Ga_{1-x}Al_xAs-GaAs solar cells, 165

High open-circuit voltage

low-high junction theory applied to solar cells, 129

simplified fabrication of back surface electric field silicon cells and novel characteristics of such cells, 119

High-efficiency

an isothermal etchback-regrowth method for high-efficiency Ga_{1-x}Al_xAs-GaAs solar cells, 171

Increased fill factor

the violet cell: an improved silicon solar cell, 149

Initial efficiencies

simplified fabrication of back surface electric field silicon cells and novel characteristics of such cells, 119

InP solar cells

InP solar cells for use in space, 221 Installation

a comprehensive report on the performance of the longest operating 350 kW concentrator photovoltaic power PV system, 1

Irradiation

InP solar cells for use in space, 221
Isothermal etchback-regrowth method
an isothermal etchback-regrowth
method for high-efficiency
Ga_{1-x}Al_xAs-GaAs solar cells, 171

Laser diodes

photovoltaic array GaAs cells response driven by high power laser diodes, 283

Light-trapping silicon solar cells

a process sequence for manufacture of ultra-thin, light-trapping silicon solar cells, 253

Liquid-phase epitaxy

high-efficiency Ga_{1-x}Al_xAs-GaAs solar cells, 165

Long term performance

a comprehensive report on the performance of the longest operating 350 kW concentrator photovoltaic power PV system, 1

Low-high junction theory

low-high junction theory applied to solar cells, 129 Market potential

photovoltaics and electric utilities: an evaluation of utility attitudes and expectations, 25

Measurement

measurement of minority carrier lifetime in silicon solar cells using an a.c. light source, 73

Minority carrier diffusion length

influence of controlled lifetime doping on ultimate technological performance of silicon solar cells, 109

Minority carrier lifetime

measurement of minority carrier lifetime in silicon solar cells using an a.c. light source, 73

radiation damage in Ge and Si detected by carrier lifetime changes: damage thresholds, 85

Multijunction cells

multijunction cells for space applications, 179

Outer space

space solar cell performance measurements and characterization, 241

Oxygen

reliability of n-CdS/p-CdTe solar modules in accelerated environmental tests and effect of oxygen, 335

Performance

InP solar cells for use in space, 221 Performance analysis

performance analysis of bifacial silicon solar cells in a space environment,

Photocurrent loss analysis

analysis of apparent quantum efficiency,

Photoelectrochemical cell

photoelectrochemical studies of copper gallium diselenide films, 267

Photoresponse

preferential doping contribution to the photoresponse of polysilicon solar cells, 49

Photovoltaic applications

photoelectrochemical studies of copper gallium diselenide films, 267

Photovoltaic characteristics

performance analysis of bifacial silicon solar cells in a space environment, 303 Polycrystalline thin film

analysis of apparent quantum efficiency, 39

Polysilicon solar cells

preferential doping contribution to the photoresponse of polysilicon solar cells, 49

Preferential doping

preferential doping contribution to the photoresponse of polysilicon solar cells, 49

Process sequence

a process sequence for manufacture of ultra-thin, light-trapping silicon solar cells, 253

Process technology

a process sequence for manufacture of ultra-thin, light-trapping silicon solar cells, 253

Processing efforts

InP solar cells for use in space, 221

Pulse decay measurements

influence of controlled lifetime doping on ultimate technological performance of silicon solar cells, 109

Quantum efficiency

analysis of apparent quantum efficiency, 39

Radiation damage

radiation damage in Ge and Si detected by carrier lifetime changes: damage thresholds, 85

simplified fabrication of back surface electric field silicon cells and novel characteristics of such cells, 119

Radiation resistance

low-high junction theory applied to solar cells, 129

Resistive loads

resistive loads powered by separate or by common electrical sources, 345

Response characteristics

testing of solar cells by means of spectral analysis, 101

Roofing tile

a new solar cell roofing tile, 361

Saudi Arabia

a comprehensive report on the performance of the longest operating 350 kW concentrator photovoltaic power PV system, 1 Semiconductors

radiation damage in Ge and Si detected by carrier lifetime changes: damage thresholds, 85

Short-wavelength response

the violet cell: an improved silicon solar cell. 149

Silicon

a new solar cell roofing tile, 361 multijunction cells for space applications, 179

radiation damage in Ge and Si detected by carrier lifetime changes: damage thresholds, 85

Silicon single crystal solar cells silicon single crystal solar cells for space applications, 201

Silicon solar cells

influence of controlled lifetime doping on ultimate technological performance of silicon solar cells, 109

measurement of minority carrier lifetime in silicon solar cells using an a.c. light source, 73

performance analysis of bifacial silicon solar cells in a space environment, 303

Simplified fabrication

simplified fabrication of back surface electric field silicon cells and novel characteristics of such cells, 119

Simulation

simulation of crystalline GaAs solar cell structures with the amorphous semiconductor analysis package, 319

Solar cells

a new solar cell roofing tile, 361 an isothermal etchback-regrowth method for high-efficiency Ga_{1-x}Al_xAs-GaAs solar cells, 171

testing of solar cells by means of spectral analysis, 101

n-CdS/p-CdTe solar modules

reliability of n-CdS/p-CdTe solar modules in accelerated environmental tests and effect of oxygen, 335

Space applications

a process sequence for manufacture of ultra-thin, light-trapping silicon solar cells, 253

multijunction cells for space applications, 179 silicon single crystal solar cells for space applications, 201

Space environment

performance analysis of bifacial silicon solar cells in a space environment, 303

Space solar cell characterization

space solar cell performance measurements and characterization, 241

Space solar cell performance

space solar cell performance measurements and characterization, 241

Spectral analysis

testing of solar cells by means of spectral analysis, 101

Stoichiometry

photoelectrochemical studies of copper gallium diselenide films, 267

System design

a comprehensive report on the performance of the longest operating 350 kW concentrator photovoltaic power PV system, 1

Tandem solar cells

multijunction cells for space applications, 179

Technology

silicon single crystal solar cells for space applications, 201

Temperature dependencies

InP solar cells for use in space, 221

Terrestrial cell effort

silicon single crystal solar cells for space applications, 201

Testing

testing of solar cells by means of spectral analysis, 101

Toxic materials

toxic materials released from photovoltaic modules during fires: health risks, 63

Ultra-thin solar cells

a process sequence for manufacture of ultra-thin, light-trapping silicon solar cells, 253

Utility applications

photovoltaics and electric utilities: an evaluation of utility attitudes and expectations, 25 Utility attitudes

photovoltaics and electric utilities: an evaluation of utility attitudes and expectations, 25

Utility expectations

photovoltaics and electric utilities: an evaluation of utility attitudes and expectations, 25

Utility experience

photovoltaic and electric utilities: an evaluation of utility attitudes and expectations, 25 Vacuum deposition

photoelectrochemical studies of copper gallium diselenide films, 267

Violet cell

the violet cell: an improved silicon solar cell, 149

Wavelength

testing of solar cells by means of spectral analysis, 101